

SEQUENCE LISTING

<110> Xu, Minzhen  
Qiu, Gang  
Humphreys, Robert

<120> CANCER CELL VACCINE

<130> U.S. Application 09/205,995, (CIP)

<140> 09/205,995

<141> 1998-12-04

<150> 09/036,746

<151> 1998-03-09

<150> 08/661,627

<151> 1996-06-11

<160> 79

<170> PatentIn Ver. 2.0

<210> 1

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: antisense  
oligonucleotide corresponding to a specific region  
of the Ii gene.

<400> 1

ctcggtagct actgg

15

<210> 2

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: antisense  
oligonucleotide corresponding to a specific region  
of the mouse Ii gene.

<400> 2

atccatggct ctgacctc

18

<210> 3  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: antisense  
oligonucleotide corresponding to a specific region  
of the mouse Ii gene.

<400> 3  
tctagcctct agtttttc 18

<210> 4  
<400> 4  
000

<210> 5  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: antisense  
oligonucleotide corresponding to a specific region  
of the mouse Ii gene.

<400> 5  
catgttatcc atggacat 18

<210> 6  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: antisense  
oligonucleotide corresponding to a specific region  
of the mouse Ii gene.

<400> 6  
catggacatt ggacgcat 18

<210> 7  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: antisense  
oligonucleotide corresponding to a specific region  
of the mouse Ii gene.

<400> 7

tggacgcatc agcaaggg

18

<210> 8

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: antisense  
oligonucleotide corresponding to a specific region  
of the mouse Ii gene.

<400> 8

cagcaaggga gtagccat

18

<210> 9

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: antisense  
oligonucleotide corresponding to a specific region  
of the mouse Ii gene.

<400> 9

agtagccatc cgcacatctg

18

<210> 10

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: antisense  
oligonucleotide corresponding to a specific region  
of the mouse Ii gene.

<400> 10

ccgcatctgg ctcacagg

18

5054367042202

<210> 11  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: antisense  
oligonucleotide corresponding to a specific region  
of the mouse Ii gene.

<400> 11  
gctcacaggt ttggcaga

18

<210> 12  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: antisense  
oligonucleotide corresponding to a specific region  
of the mouse Ii gene.

<400> 12  
tttggcagat ttcggaag

18

<210> 13  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: antisense  
oligonucleotide corresponding to a specific region  
of the mouse Ii gene.

<400> 13  
tttcggaagc ttcatgcg

18

<210> 14  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: antisense  
oligonucleotide corresponding to a specific region  
of the mouse Ii gene.

<400> 14

cttcatgcga aggctctc

18

<210> 15

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: antisense  
oligonucleotide corresponding to a specific region  
of the mouse Ii gene.

<400> 15

aaggctctcc agttgcag

18

<210> 16

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: antisense  
oligonucleotide corresponding to a specific region  
of the mouse Ii gene.

<400> 16

cagttgcagg ttctggga

18

<210> 17

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: antisense  
oligonucleotide corresponding to a specific region  
of the mouse Ii gene.

<400> 17

gttctgggag gtgatggt

18

<210> 18

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: antisense  
oligonucleotide corresponding to a specific region  
of the mouse Ii gene.

<400> 18

ggtgatggtc agcttgctc

18

<210> 19

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: antisense  
oligonucleotide corresponding to a specific region  
of the mouse Ii gene.

<400> 19

cagcttgctct aggcggcc

18

<210> 20

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: antisense  
oligonucleotide corresponding to a specific region  
of the mouse Ii gene.

<400> 20

taggcggccc tgttgctg

18

<210> 21

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: antisense  
oligonucleotide corresponding to a specific region  
of the mouse Ii gene.

<400> 21

ctgttgctgg tacaggaa

18

<210> 22

20250404 14:50:00

<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: antisense  
oligonucleotide corresponding to a specific region  
of the mouse Ii gene.

<400> 22  
gtacaggaag taagcagt

18

<210> 23  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: antisense  
oligonucleotide corresponding to a specific region  
of the mouse Ii gene.

<400> 23  
gtaagcagtg gtggcctg

18

<210> 24  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: antisense  
oligonucleotide corresponding to a specific region  
of the mouse Ii gene.

<400> 24  
ggtggcctgc ccagccaa

18

<210> 25  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: antisense  
oligonucleotide corresponding to a specific region  
of the mouse Ii gene.

<400> 25

cccagccaag agcagagc

18

<210> 26

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: antisense  
oligonucleotide corresponding to a specific region  
of the mouse Ii gene.

<400> 26

gagcagagcc accaggac

18

<210> 27

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: antisense  
oligonucleotide corresponding to a specific region  
of the mouse Ii gene.

<400> 27

caccaggaca gagacacc

18

<210> 28

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: antisense  
oligonucleotide corresponding to a specific region  
of the mouse Ii gene.

<400> 28

agagacaccg gtgtacag

18

<210> 29

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

2025 RELEASE UNDER E.O. 14176



<400> 29

18

<210> 30

<211> 18

**<212> DNA**

**<213> Artificial Sequence**

**<220>**

<400> 30

18

<210> 31

<211> 18

**<212> DNA**

<213> Artificial Sequence

**<220>**

<400> 31

18

<210> 32

<211> 18

<212> DNA

<213> Artificial Sequence

**<220>**

<400> 32

18

**<210> 33**

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: antisense  
oligonucleotide corresponding to a specific region  
of the mouse Ii gene.

<400> 33

tctagggcgg ttgccag

18

<210> 34

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: antisense  
oligonucleotide corresponding to a specific region  
of the mouse Ii gene.

<400> 34

gttgcccagt atgggcaa

18

<210> 35

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: antisense  
oligonucleotide corresponding to a specific region  
of the mouse Ii gene.

<400> 35

tatgggcaac tgttcatg

18

<210> 36

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: antisense  
oligonucleotide corresponding to a specific region  
of the mouse Ii gene.

<400> 36

ctgttcacgg ttagagat

18

<210> 37

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: antisense  
oligonucleotide corresponding to a specific region  
of the mouse Ii gene.

<400> 37

gtagagatg aggtcgcg

18

<210> 38

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: antisense  
oligonucleotide corresponding to a specific region  
of the mouse Ii gene.

<400> 38

gaggtcgcgt tggatcgc

18

<210> 39

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: antisense  
oligonucleotide corresponding to a specific region  
of the mouse Ii gene.

<400> 39

gcgttggtca tccatggc

18

<210> 40

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: antisense

30543904300

127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

18

18

18

18

**<212> DNA**



<210> 48  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: antisense  
oligonucleotide corresponding to a specific region  
of the mouse Ii gene.

<400> 48  
ctgctgctgt tgctgctg 18

<210> 49  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: antisense  
oligonucleotide corresponding to a specific region  
of the mouse Ii gene.

<400> 49  
gtcgcgttgg tcatccat 18

<210> 50  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: antisense  
oligonucleotide corresponding to a specific region  
of the mouse Ii gene.

<400> 50  
tcgcgttggt catccatg 18

<210> 51  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: antisense  
oligonucleotide corresponding to a specific region

of the mouse Ii gene.

<400> 51  
cgcggttggtc atccatgg 18

<210> 52  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: antisense  
oligonucleotide corresponding to a specific region  
of the mouse Ii gene.

<400> 52  
cgttggtcat ccatggct 18

<210> 53  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: antisense  
oligonucleotide corresponding to a specific region  
of the mouse Ii gene.

<400> 53  
gttggtcatc catggctc 18

<210> 54  
<211> 18  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: antisense  
oligonucleotide corresponding to a specific region  
of the mouse Ii gene.

<400> 54  
tggtcatcca tggctcta 18

<210> 55  
<211> 18  
<212> DNA  
<213> Artificial Sequence

1005433042202

[illegible]

18

18

18

18

18

18

18

18

18

18

18

18

18

18

18

18

18

18

18

18

18

18

18

18

18

18



<220>  
<223> Description of Artificial Sequence: antisense  
oligonucleotide corresponding to a specific region  
of the mouse Ii gene.

18

<213> Artificial Sequence

<223> Description of Artificial Sequence: antisense oligonucleotide corresponding to a specific region of the mouse Ii gene.

18

**<213> Artificial Sequence**

<223> Description of Artificial Sequence: antisense oligonucleotide corresponding to a specific region of the mouse Ii gene.

18

000

000

000

### <213> Artificial Sequence

**<220>**

[illegible]

<223> Description of Artificial Sequence: Reverse gene construct corresponding to a specific region of the mouse Ii gene.

<400> 68

tgtgggaaaa actagaggct agagccatgg atgaccaacg cgacctcatc tctaaccatg 60  
aacagttgcc catactgggc aaccgcccta gagagccaga aag 103

<210> 69

<211> 91

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Reverse gene construct corresponding to a specific region of the mouse Ii gene.

<400> 69

atactgggca accgccctag agagccagaa aggtgcagcc gtggagctct gtacaccggt 60  
gtctctgtcc tgggtggctct gctcttggt g 91

<210> 70

<211> 134

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Reverse gene construct corresponding to a specific region of the mouse Ii gene.

<400> 70

acctgtgagc cagatgcgga tggctactcc cttgctgatg cgtccaatgt ccatggataa 60  
catgctcctt gggcctgtga agaacgttac caagtacggc aacatgacc aggaccatgt 120  
gatgcactcg ctca 134

<210> 71

<211> 145

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Reverse gene construct corresponding to a specific region of the mouse Ii gene.

<400> 71

aagaacgtta ccaagtacgg caacatgacc caggaccatg tgatgcatct gctcacgagg 60  
tctggacccc tggagtaccc gcagctgaag gggaccttcc cagagaatct gaagcatctt 120  
aagaactcca tggatggcgt gaact 145

<210> 72  
<211> 169  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Reverse gene  
construct corresponding to a specific region of  
the mouse Ii gene.

<400> 72  
gggtcccaga cacacagcag cagcagcagc agcagcagca gcaacagcag cagcagcagc 60  
agcgctgtg ggaaaaacta gaggctagag ccatggatga ccaacgcgac ctcattctta 120  
accatgaaca gttgcccata ctgggcaacc gccctagaga gccagaaag 169

<210> 73  
<211> 160  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Reverse gene  
construct corresponding to a specific region of  
the mouse Ii gene.

<400> 73  
ccatggatga ccaacgcgac ctcattctta accatgaaca gttgcccata ctgggcaacc 60  
gccctagaga gccagaaagg tatgtgtgaa taccagcaga gagcccttac ctctggagga 120  
cacagaatgc aggctggggg agggacacag agctctgttg 160

<210> 74  
<211> 237  
<212> DNA  
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Reverse gene  
construct corresponding to a specific region of  
the mouse Ii gene.

<400> 74  
gtgcagccgt ggagctctgt acaccggtgt ctctgtcctg gtggctctgc tcttggctgg 60  
gcaggccacc actgcttact tctgtacca gcaacagggc cgcttagaca agctgaccat 120  
cacctcccag aacctgcaac tggagagcct tcgcatgaag cttccgaaat gtgcgtgctc 180

cacctgtccc tcacctcaca gacatcattt ctccatttag ccctcccga tctgcct 237

<210> 75

<211> 107

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Reverse gene  
construct corresponding to a specific region of  
the mouse Ii gene.

<400> 75

gggtcccaga cacacagcag cagcagcagc agcagcagca gcaacagcag cagcagcagc 60  
agcgcctgtg ggaaaaacta gaggctagag ccatggatga ccaacgc 107

<210> 76

<211> 104

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Reverse gene  
construct corresponding to a specific region of  
the mouse Ii gene.

<400> 76

tccgtcccga cagatactgg gcaaccgccc tagagagcca gaaaggtgca gccgtggagc 60  
tctgtacacc ggtgtctctg tctgggtggc tctgctcttg gctg 104

<210> 77

<211> 190

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Reverse gene  
construct corresponding to a specific region of  
the mouse Ii gene.

<400> 77

gggtcccaga cacacagcag cagcagcagc agcagcagca gcaacagcag cagcagcagc 60  
agcgcctgtg ggaaaaacta gaggctagag ccatggatga ccaacgcgac ctcattctta 120  
accatgaaca gttgcccata ctgggcaacc gccctagaga gccagaaagg tgcagccgtg 180  
gagctctgta 190

<210> 78

<211> 148

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Reverse gene  
construct corresponding to a specific region of  
the mouse Ii gene.

<400> 78

aacagcagca gcagcagcag cgcctgtggg aaaaactaga ggctagagcc atggatgacc 60  
aacgcgacct catctctaac catgaacagt tgcccatact gggcaaccgc cctagagagc 120  
cagaaagggtg cagccgtgga gctctgta 148

<210> 79

<211> 124

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Reverse gene  
construct corresponding to a specific region of  
the mouse Ii gene.

<400> 79

tgtgggaaaa actagaggct agagccatgg atgaccaacg cgacctcatc tctaaccatg 60  
aacagttgcc catactgggc aaccgcccta gagagccaga aaggtgcagc cgtggagctc 120  
tgta 124